

WE CLAIM:

1. A portable color display game machine to which both a first storage medium and a second storage medium are selectively attachable, said portable color display game machine comprising:

a storage medium discriminator for making a first determination when the first storage medium is attached, and making a second determination when the second storage medium is attached;

color processing circuitry for performing first color processing on data read from the first storage medium in response to the first determination and outputting a first color display signal, and for performing second color processing on data read from the second storage medium in response to the second determination and outputting a second color display signal; and

a color display for displaying the first color display signal when the first storage medium is attached to said portable color display game machine and the second color display signal when the second storage medium is attached to said portable color display game machine.

2. The portable color display game machine according to claim 1, wherein the first storage medium stores tone data, and said color processing circuitry includes a first color palette for converting the tone data into the first color display signal.

3. The portable color display game machine according to claim 1, wherein the second storage medium stores color data, and said color processing circuitry includes a second color palette for converting the color data into the second color display signal.

1 4. The portable color display game machine according to claim 3, wherein
2 the first color palette consists of a first number of colors, and the second color palette
3 consists of a second number of colors that is greater than the first number.

1 5. The portable color display game machine according to claim 4, wherein
2 the first color palette includes a background character color palette used to color-
3 display a background character, and an object character color palette used to color-
4 display an object character.

1 6. The portable color display game machine according to claim 5, wherein
2 the first object character color palette comprises a plurality of color palettes.

1 7. The portable color display game machine according to claim 4, wherein
2 the second color palette includes a background character color palette used to color-
3 display a background character, and an object character color palette used to color-
4 display an object character.

1 8. The portable color display game machine according to claim 7, wherein
2 the background character color palette of the second color palette comprises a plurality
3 of background color palettes, and the object character color palette of the second color
4 palette comprises a plurality of object color palettes.

1 9. A storage medium for a portable game machine, said storage medium
2 being removably attachable to said portable game machine so as to supply data and a
3 program to an image processor of said portable game machine, said storage medium
4 being characterized in that both tone data and color data are pre-stored for image
5 display, and one of the tone data and the color data is selectively processed by said
6 image processor of said portable game machine.

1 10. The storage medium according to claim 9, wherein
2 the color data includes color palette data, and

3 said image processor of said portable game machine outputs a display signal
4 comprising a background character image and a display signal comprising an object
5 character image, and

6 the color palette data includes background color palette data used for the
7 background character image and object color palette data used for the object character
8 image.

1 11. A storage medium storing a program for color display and a portable
2 color display game machine using the storage medium, wherein

3 said storage medium includes a background image color palette data storage
4 area for storing different kinds of color palette data for a background image, an object
5 image color palette data storage area for storing different kinds of color palette data for
6 an object image, and a color palette designating data storage area for storing
7 background image color palette designating data that designates an arbitrary color
8 palette for each character in the background image, and object image color palette
9 designating data that designates an arbitrary color palette for each character in the
10 object image, and

11 said portable color display game machine includes a color image signal
12 generator for generating a background color image signal based on the background
13 image color palette data designated by the background image color palette designating
14 data, and for generating an object color image signal based on the object image color
15 palette data designated by the object image color palette designating data.

1 12. A color display game machine to which one of a first storage medium
2 storing a program for monochrome display and a second storage medium storing a
3 program for color display is selectively attachable, wherein

4 said first storage medium includes a background image tone data storage area
5 for storing tone data of a background image, and an object image tone data storage
6 area for storing tone data of an object image,

7 said second storage medium includes a background image color palette data
8 storage area for storing different kinds of color palette data for the background image,
9 an object color palette data storage area for storing different kinds of color palette data
10 for the object image, and a color palette designating data storage area for storing
11 background image color palette designating data that designates a color palette for
12 each character in the background image, and object image color palette designating
13 data that designates a color palette for each character in the object image, and
14 one of the first storage medium and the second storage medium includes a
15 color-readiness data storage area for storing data that indicates color unreadiness or
16 data that indicates color readiness, and
17 said color display game machine comprises:
18 a storage medium discriminator for determining whether a storage medium
19 attached to the game machine is said first storage medium or said second storage
20 medium, on the basis of the data stored in the color-readiness storage area;
21 a background image color palette storage area for storing background image
22 color palette data corresponding to the background image tone data stored in said first
23 storage medium;
24 an object image color palette storage area for storing object image color palette
25 data corresponding to the object image tone data stored in said first storage medium;
26 and
27 a color image signal generator for generating a color image for the background
28 image and for the object image,
29 wherein if it is determined by said storage medium discriminator that said first
30 storage medium is attached, said color image signal generator generates the color
31 image signal for the background image on the basis of a combination of the
32 background image tone data and the background image color palette data, and
33 generates the color image signal for the object image on the basis of a combination of
34 the object image tone data and the object image color palette data, and if it is
35 determined by said storage medium discriminator that said second storage medium is

36 attached, said color image signal generator generates the color image signal for the
 37 background image on the basis of the background image color palette data designated
 38 by the background image color palette designating data, and generates the color image
 39 signal for the object image on the basis of the object image color palette data
 40 designated by the object image color palette designating data.

1 13. The color display game machine according to claim 12, wherein
 2 the object image color palette storage area stores first object image color palette
 3 data and second object image color palette data, and
 4 the first storage medium further stores color palette designating data that
 5 designates color palette data for the object image, and
 6 if the first object image color palette is selected on the basis of the color palette
 7 designating data, said color image signal generator generating the color image signal
 8 for the object image on the basis of a combination of the object image tone data and
 9 the first object image color palette, and if the second object image color palette is
 10 selected on the basis of the color palette designating data, said color image signal
 11 generator generates the color image signal for the object image on the basis of a
 12 combination of the object image tone data and the second object image color palette.

1 14. The color display game machine according to claim 13, further
 2 comprising:
 3 a user input circuit operable by a user; and
 4 a color palette changing circuit for changing the background image color
 5 palette data and the object image color palette data on the basis of color palette data
 6 selected by the user using said user input circuit,
 7 said color image signal generator generating the color image signal for the
 8 background image on the basis of a combination of the background image tone data
 9 and the background image color palette data changed by said color palette changing
 10 circuit, and generating the color image signal for the object image on the basis of a

11 combination of the object image tone data and the object image color palette data
12 changed by said color palette changing circuit.

1 15. A portable color display game machine comprising:
2 a game cartridge type determining circuit configured to determine whether a
3 color game cartridge storing color data for a game or a monochrome game cartridge
4 storing monochrome data for a game is attached to said color display game machine;
5 and
6 color display generating circuitry configured to generate a color game display
7 based on the color data when said color game cartridge is attached to said color
8 display game machine, and to generate a color game display based on the
9 monochrome data when said monochrome game cartridge is attached to said color
10 display game machine.

1 16. The portable color display game machine according to claim 15, further
2 comprising:
3 a palette selection circuit configured for user-selection of one of a plurality of
4 different color palettes to be used by said color display generating circuitry to generate
5 a color game display based on the monochrome data.

1 17. The portable color display game machine according to claim 16, wherein
2 each of the plurality of different color palettes to be used by said color display
3 generating circuitry to generate a color game display based on the monochrome data
4 comprises a background color palette and one or more object color palettes.

1 18. The portable color display game machine according to claim 15, wherein
2 said color display generating circuitry comprises a processor operable at two or more
3 different clock speeds.

1 19. The portable color display game machine according to claim 15, wherein
2 said color display generating circuitry generates a color game display based on color

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3 data comprising a first color palette for background characters and a second different
4 color palette for object characters when said color game cartridge is attached to said
5 portable color display game machine.

1 20. The portable color display game machine according to claim 15, wherein
2 said game cartridge type determining circuit determines whether a color game
3 cartridge storing color data for a game or a monochrome game cartridge storing
4 monochrome data for a game is attached to said color display game machine on the
5 basis of color readiness/unreadiness data read from said game cartridges.

1 21. A game program storage medium for use with a portable game machine
2 having a processor operable at a plurality of different clock speeds, said game program
3 storage medium storing clock speed data usable by said portable game machine in a
4 process for setting a clock speed of said processor.

1 22. For use with a portable game machine having a game program executing
2 processing system including a microprocessor to execute a video game program and
3 player controls operable by a player to generate video game control signals; a portable
4 storage device for controlling the operation of said portable game machine
5 comprising:

6 a memory media for storing video game instructions and graphics and sound
7 data for said video game program; and

8 a connector for coupling said video game instructions and said graphics and
9 sound data retrieved from said memory media to said portable game machine,

10 said video game instructions including a command for causing said
11 microprocessor to be set at one of a plurality of different clock speeds.

1 23. A portable color display game machine comprising:

2 an external memory for storing a video game program;

3 player controls operable by a player for generating video game control signals;
4 a color display panel;
5 a processing system for executing said video game program in accordance with
6 the video game control signals; and
7 a palette selection circuit configured for user-selection of one of a plurality of
8 different color palettes,
9 wherein said processing system is configured to determine whether said
10 external memory stores color data or monochrome data for the video game program
11 and to generate a color display on said color display panel based on the color data if
12 said external memory stores color data and to generate a color display on said color
13 display panel based on the monochrome data and the selected color palette if said
14 external memory stores monochrome data.

1 24. The portable color display machine according to claim 23, wherein said
2 video game program of said external memory includes a command for causing said
3 processing system to be set at one of a plurality of different clock speeds.

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